

1 **BEFORE THE**
2 **PUBLIC SERVICE COMMISSION OF WISCONSIN**

3 Application of Madison Gas and Electric
4 Company for Authority to Change Electric
5 and Natural Gas Rates

Docket 3270-UR-117

6 **REBUTTAL TESTIMONY OF GREGORY A. BOLLAM**
7 **ON BEHALF OF APPLICANT**

8 **Q. Please state your name and business address.**

9 A. My name is Gregory A. Bollom. My business address is 133 South Blair Street, Post Office
10 Box 1231, Madison, Wisconsin 53701-1231.

11 **Q. By whom are you employed and in what capacity?**

12 A. I am employed by Madison Gas and Electric Company (MGE) as Assistant Vice President –
13 Energy Planning.

14 **Q. Have you previously submitted Direct Testimony in this case?**

15 A. Yes, I have.

16 **Q. What is the purpose of your rebuttal testimony?**

17 A. I am responding to the direct testimonies of Michael Vickerman of RENEW Wisconsin,
18 Jeanne Hoffman of the City of Madison, and Corey Singletary of PSCW staff.

19 **Q. Do you agree with Mr. Vickerman that the method used by MGE for determining a**
20 **premium for MGE's green pricing program, Green Power Tomorrow (GPT), is no**
21 **longer appropriate?**

22 A. No, I do not. MGE continues to believe it is appropriate to base the RWE-1 and BWE 1
23 rates – the price per kWh for participating in GPT – on the incremental cost difference
24 between the cost of the standard market energy mix and the cost of renewable energy used to
25 supply the GPT program.

1 **Q. Do you agree with Mr. Vickerman that GPT is a successful program?**

2 A. Absolutely. Of the 137 MW of wind projects Mr. Vickerman cites, 104 MW were acquired
3 primarily to supply GPT.

4 **Q. Does MGE need to acquire more renewable energy to comply with the renewable**
5 **portfolio standard (RPS) established by 2005 Wisconsin Act 141?**

6 A. Based on current forecasts of retail sales, generation from MGE-owned wind projects,
7 renewable energy purchases under existing PPAs, and careful use of renewable energy credits
8 created under Act 141, MGE does not project the need for additional renewable resources to
9 meet Wisconsin's current RPS requirements until 2030. Even if the RPS requirements were
10 increased to the levels proposed in the Clean Energy Jobs Act that failed to pass in the last
11 legislative session, MGE would not need to acquire any additional renewable resources until
12 after 2020. I disagree with Mr. Vickerman's conclusion that it is prudent for utilities to carry a
13 higher percentage of renewable energy than is minimally required. There will always be some
14 short-term mismatch between the level of resources a utility carries and the level it requires.
15 The scale and availability of generation projects typically require utilities to acquire
16 generation in larger increments than needed to serve their current needs. But intentionally
17 bringing surplus resources, whether conventional or renewable, into the supply mix earlier
18 than is reasonably necessary to meet forecast requirements simply increases costs for all
19 customers.

20 **Q. Both Mr. Vickerman and Ms. Hoffman propose setting the GPT rate based on the cost**
21 **differential between renewable energy used to supply GPT and renewable energy used to**
22 **meet MGE's RPS requirements. Is this a reasonable alternative?**

23 A. As Mr. Vickerman correctly points out, the only significant difference between the resource
24 mix currently used to supply MGE's RPS requirements and that used to supply the GPT
25 program is the GPT program's inclusion of customer-owned solar-generated energy purchased

1 by MGE under the Clean Power Partners (CPP) program. The wind resources used to supply
2 both the RPS and GPT are very similar and in some cases identical. For example, MGE's
3 Rosiere wind project supplies both a portion of the RPS requirement and a portion of the GPT
4 program. The MGE-owned Top of Iowa wind project supplies the RPS while energy from the
5 Top of Iowa project purchased under a PPA supplies a portion of GPT. Given the small cost
6 differential attributable to the cost of energy currently purchased under CPP, using the
7 methodology Mr. Vickerman suggests would result in a GPT premium of less than four
8 hundredths of a cent per kilowatt hour. To MGE's customers, participation in GPT would
9 appear to be essentially free. Yet as participation grew in response to this pricing illusion, the
10 actual cost difference between renewable energy and the standard market energy mix would
11 increase total generation costs, and thereby impose rate increases and higher electric bills on
12 all customers. Therefore MGE believes the pricing mechanism proposed by Mr. Vickerman
13 and Ms. Hoffman is not appropriate.

14 **Q. Do you agree with Mr. Vickerman that the state RPS changes the dynamic of how**
15 **utilities should view and price renewable energy?**

16 A. As I indicated in my direct testimony, voluntary green energy programs are a way to increase
17 the amount of renewable energy in a utility's supply mix earlier than required and increase the
18 overall amount of renewable energy in the long run. In the absence of an RPS, the requirement
19 is zero, so voluntary programs enable utilities to include renewables in the mix when they
20 might not otherwise pass an economic test. With an RPS requirement, voluntary programs
21 provide a way to add renewables above the minimum level required. I agree with
22 Mr. Vickerman that Wisconsin's RPS forces utilities to acquire renewable energy for all of its
23 customers up to the specified percentage. Wisconsin's energy priorities law previously
24 designated renewable energy as a preferred resource class. Act 141, which Mr. Vickerman
25 cites in his testimony, further defined the nature of that preferred class in two ways. It

1 established annual percentage requirements for each utility and precludes the PSCW from
2 requiring additional renewable resources so long as a utility has met its RPS requirement. I
3 also agree with him that the RPS requirement "prevails regardless of a utility's individual
4 capacity needs or the existence of more cost- effective alternatives," (D2.8) up to and until the
5 utility meets its RPS percentage. However once a utility has met its annual RPS percentage
6 requirement, renewable resources lose the preferred designation and must compete on a cost
7 basis with other resources available in the market. So while the existence of the RPS does
8 change the starting point from which voluntary programs add renewables to the supply mix, it
9 does not change how a utility should view or price renewable energy sold to customers
10 through voluntary programs.

11 **Q. Can a utility use renewable energy currently dedicated for a voluntary program towards**
12 **current RPS compliance?**

13 A. Yes, but as Mr. Singletary points out in his testimony, none of the Wisconsin utilities –
14 including MGE – currently does so. The costs of meeting mandated requirements should
15 appropriately be spread across all customers. And just as it is unfair to ask participants in a
16 voluntary program like GPT to pay a larger share of the energy costs used to meet state
17 mandates than that included in the rates of all customers, MGE believes it is equally unfair to
18 ask all customers to pay for energy subscribed by participants in a voluntary program.

19 **Q. How does MGE treat renewable resource credits generated by its voluntary GPT**
20 **program?**

21 A. Credits generated by resources used to supply GPT are tracked in the Midwest Renewable
22 Energy Tracking System (M-RETS). Credits associated with all sales to participants in the
23 GPT program are retired annually.

1 **Q. Can a utility use renewable energy currently dedicated for a voluntary program towards**
2 **RPS compliance in the future?**

3 A. Yes, but it is not as easy as Mr. Vickerman suggests. MGE could decide at some future time to
4 close the GPT program and roll the future generation into subsequent RPS compliance. But
5 some customers have an independent need for renewable energy above the RPS level included
6 in everyone's energy mix. Some have chosen to brand their products based on the inputs to
7 their own production. Some have made commitments to achieve green building certifications.
8 These customers will have a continuing need to purchase renewable resources above the RPS
9 level embedded in the mix for all customers regardless of the level of the RPS. Further, if the
10 economic evaluation justifies closing GPT at some future date and rolling the GPT energy into
11 MGE's RPS compliance mix, the economic benefits will flow directly to both participants and
12 non-participants equally at the time the program is closed. There is no future value that can be
13 discounted back to support a current subsidy to participants.

14 **Q. In addition to future flexibility, Mr. Vickerman also suggests programs like GPT enable**
15 **utilities to achieve greater greenhouse gas reductions than would be possible through**
16 **compliance with an RPS alone. Does this perceived benefit justify a subsidized rate for**
17 **program participants?**

18 A. I certainly agree that setting the GPT premium at a value less than the full incremental cost
19 difference between the GPT renewable energy supply and the general market supply mix
20 would provide participants a more affordable avenue to achieve their own environmental and
21 emission reduction goals. However it does so only because non-participants are being forced
22 to subsidize the program. If the GPT premium is not allowed to rise or fall over time to reflect
23 the incremental cost difference between market energy and the renewable resources that
24 supply GPT, then non-participants, currently 90% of MGE's customers, are either denied the

1 opportunity to fully benefit from decreased market energy costs or will be subsidizing
2 compliance costs that should be equally allocated across all customers.

3 **Q. Do you agree with Mr. Singletary that perhaps the most beneficial outcome of setting the**
4 **GPT premium to allow for full recovery of the incremental costs of the program would**
5 **come from sending more accurate price signals to customers?**

6 A. Yes, I do. The PSCW has emphasized the importance of sending proper price signals to
7 customers in recent years. For example, in MGE's last rate case (Docket 3270-UR-116) the
8 Commission ordered MGE to close its existing commercial and industrial Cg-1 tariff and
9 transfer customers to the Cg-4 time of use tariff, noting that the time-differentiated tariff
10 provides customers with a better price signal. The order also required MGE to file a plan for
11 splitting the two pricing periods in its current time of use rates into additional pricing periods,
12 to provide more efficient price signals to customers. The Commission further ordered MGE to
13 develop a plan to bid its existing direct load control program and interruptible loads into the
14 MISO energy market, with one of the stated goals being the provision of a better price signal
15 to customers. In addition, the Commission agreed with CUB in ordering MGE to include in its
16 2012 rate application innovative rate designs that utilize the capabilities the new meters MGE
17 will install with grant funds it receives from the U.S. Department of Energy, again with the
18 goal of sending more accurate price signals to customers. The PSCW imposed similar
19 requirements on other utilities in their most recent rate cases. Adopting the novel GPT pricing
20 methodology proposed by Mr. Vickerman and Ms. Hoffman would serve the opposite
21 purpose, by further disguising the true cost of participation in GPT, contrary to the stated
22 policy of the PSCW in recent years.

1 **Q. Mr. Vickerman discusses price stability in his testimony. Isn't it true that the price of the**
2 **renewable energy used to supply GPT has remained stable?**

3 A. The direct cost to MGE of the renewable energy used to supply GPT has remained stable. The
4 underlying cost of the standard market energy mix has decreased, thereby increasing the
5 incremental cost difference between GPT energy and the standard market energy mix. I agree
6 again with Mr. Singletary that if you consider the net bill impact rather than the rates
7 themselves, the proposed adjustment in the GPT premium will have little effect on the total
8 cost paid by program participants. All else being equal, as standard market energy costs go
9 down, average rates for all customers will be decreased to reflect the savings. The GPT
10 premium will increase, but the net rate paid by GPT participants will not increase. While there
11 are many factors other than energy costs that can cause overall rates to go up or down in any
12 particular case, as long as fuel costs are treated equitably across all customer classes, and the
13 GPT premium is adjusted to reflect incremental cost of the renewable energy used to supply
14 the program, the total cost of participation remains stable.

15 **Q. Mr. Singletary suggests that to alleviate or smooth out frequent changes in the GPT**
16 **premium due to the inherently more volatile nature of the underlying cost of the**
17 **standard market energy mix, the Commission could consider using a three-year rolling**
18 **average of LMPs. Is this something MGE would support?**

19 A. MGE supports smoothing price changes to the GPT premium. Smoothing is the main driver in
20 MGE's request to reflect only an increment of the current price differential in this rate case.
21 The method Mr. Singletary suggests is one of several reasonable ways to smooth out frequent
22 changes in the premium. MGE does not currently have three years of generation node LMP
23 data for each of the projects used to supply GPT. Three of the wind projects supplying the
24 program only became commercial during 2008, but conceptually, I agree that using a three-
25 year rolling average is a reasonable way to dampen the effect of year-to-year swings in LMPs.

1 I would also suggest that if a three-year average LMP is used to represent the standard market
2 energy mix, it would seem appropriate to use a three-year average of renewable energy costs
3 as well. While the renewable energy costs are more predictable, each of MGE's PPAs does
4 include an annual escalation clause.

5 **Q. Mr. Vickerman also recommends that MGE establish a net energy billing tariff for wind**
6 **turbines up to 100 kW. Do you believe this is a reasonable proposal?**

7 A. For several reasons I do not believe this proposal is reasonable or cost effective for MGE or its
8 non-participating customers. First, net energy billing results in unreasonably high costs of
9 acquiring wind energy for MGE's system. While the average LMP for energy purchased from
10 MISO is currently around 3 cents/kWh and the average cost of the wind energy MGE
11 purchases under its PPAs is less than 6 cents/kWh, a residential customer with a small wind
12 system under Mr. Vickerman's proposal would receive more than 14 cents/kWh in 2011.
13 Moreover, MGE does not need additional renewable energy to supply either its projected RPS
14 or GPT requirements for at least a decade. There is no justification for all customers to
15 provide a significant subsidy for renewable energy that MGE does not need. Second, our
16 customers have told us that they are not willing to pay significantly more for MGE to add
17 local renewable energy to its energy mix. Our customer research has consistently shown that
18 although they are environmentally conscious and mindful of the positive impact local projects
19 might have on the economy, most customers still opt for cheaper green energy options. MGE
20 already has a parallel generation tariff available for customer-owned renewable projects that
21 offers a rate of 6.1 cents/kWh. This represents a fair market value for renewable energy. There
22 is no justification for MGE to make net energy billing available to wind projects up to
23 100 kW.

24 **Q. Does this complete your rebuttal testimony?**

25 A. Yes.